

Application: Software Testing

Industry: Automotive

CUSTOMER SUCCESS



Customer Challenge

A Tier 1 automotive OEM electronics company, very safety-conscious as are all automotive companies, needed advanced software testing tools including code coverage with fault injection to comply with internal safety initiatives as well as commercial regulations.

Imperas Solution

Key application: to use virtual platform observability to analyze the effectiveness of software tests, including coverage and fault injection. With the Imperas virtual platform, software test and analysis was multicore capable, as the design required.

Imperas M*SDK and OVP Fast Processor Models, along with their simulation framework and engine, delivered the high performance critical for comprehensive testing. The platform was non-intrusive, with no instrumentation or modification of the source code required. Imperas also delivered an overview and detailed source code analysis reports, including line code coverage capability.

Benefits

Imperas delivered a high-performance virtual platform solution for complex automotive hardware/ software systems, enabling comprehensive simulation, verification and debug. Imperas models helped the automotive electronics OEM get started quickly and accelerate development. Most importantly, Imperas delivered a solution for comprehensive quality verification, including corner cases and fault injection.

Business Challenges

- Safety initiatives
- Regulatory compliance

Design Challenges

- Software / hardware development, debug and test
- Reliability and observability
- Corner case verification
- Fault injection

Results

- Reliability
- Quality
- Compliance



